

reactive gas flow rate and positive electrode voltage dose.

15. The method of claim 11 wherein a first closing of an electric switch produces a first battery discharge and a negative electrode voltage level.

16. The method of claim 11 wherein the operating negative electrode voltage level is determined by direct observation.

17. The method of claim 11 wherein the plurality of positive electrode voltage doses are connected by switches controlled by logic.

#### ABSTRACT OF DISCLOSURE

038 The Voltage Dosimeter is a method and apparatus that automatically controls voltage producing sources to deliver varying voltage to reduce the need for constant voltage production and it provides switching ability between devices by maintaining the negative electrode voltage of voltage producing sources in a predetermined range. In the preferred embodiment a maximal reactive gas flow rate produces the first positive electrode voltage dosage of a fuel cell, then positive electrode voltage doses repeatedly sequence at predetermined intervals from smallest to largest until the current negative electrode voltage is in the desired range. Then the reactive gas flow rate and positive electrode voltage dosage are selected. The method continues with the delivery of the selected reactive gas flow rate and positive electrode voltage dose by the voltage producing source so as to maintain the negative electrode voltage in the desired range.